

مورد 1

$$4 \times B - B^2$$

$$(1,2)(1,3)(2,2)(2,2)(3,2)(3,2) - (2,2)(2,2)(2,2)(2,2) = \{(1,2), (1,3)\}$$

سوال 1

$$f(n) = \{(3, m^2), (2, 1), (-2, m), (-2, m), (3, m+2), (m, 2)\}$$

$$m^2 + m + 2 \Rightarrow m^2 - m - 2 = 0 \Rightarrow (m-2)(m+1) = 0 \Rightarrow m = 2, -1 \Rightarrow m \in \{-1\}$$

سوال 2

$$g(n) = \{(3, m^2), (2, 1), (m, 2), (3, m+2), (-2, m), (-1, 3)\}$$

$$m^2 + m + 2 \Rightarrow m^2 - m - 2 = 0 \Rightarrow (m-2)(m+1) = 0 \Rightarrow m = 2, -1 \Rightarrow m \in \{-1, 2\}$$

سوال 3

$$f(n) = \begin{cases} n^2 - 1 & n \leq 1 \\ an + b & 1 \leq n \leq 2 \\ n^3 & n \geq 2 \end{cases} \quad \begin{cases} n=1 \rightarrow n^2 - 1 = a + b - 1 = a + b \Rightarrow a + b = 0 \\ n=2 \rightarrow an + b = n^3 \rightarrow 2a + b = 8 \rightarrow a + b = 4 \end{cases}$$

$$\begin{cases} a + b = 0 \\ 2a + b = 4 \end{cases} \Rightarrow a = 1, b = -1$$

سوال 4

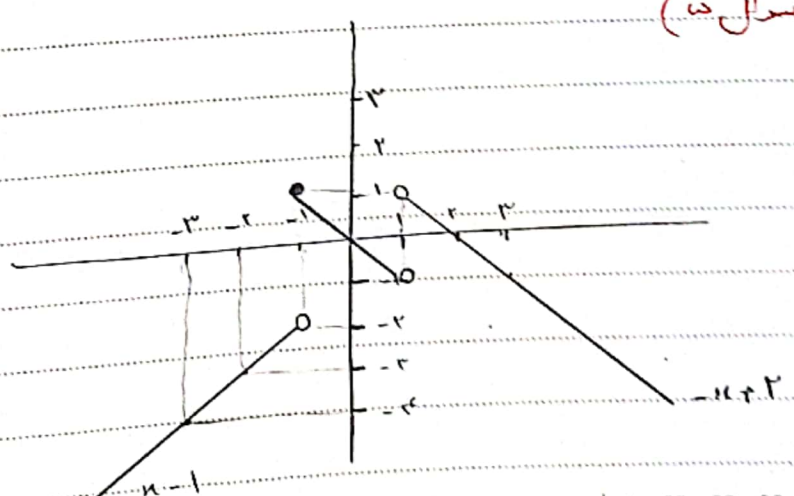
$$f(x) = \begin{cases} 2x - 3 & x \geq k \\ 3 - 2x & x \leq k \end{cases} \xrightarrow{x=k} \begin{cases} 2k - 3 = 3 - 2k \rightarrow 2k - 3 = 3 - 2k \\ \rightarrow 4k = 6 \rightarrow k = \frac{3}{2} = 1.5 \end{cases}$$

سوال 5

$$f(x) = \begin{cases} -x + 2 & x > 1 \\ -x & -1 \leq x \leq 1 \\ x - 1 & x \leq -1 \end{cases}$$

$$D_f = \mathbb{R} - \{1\}$$

$$R_f = (-\infty, +1]$$



**S**

$$\Rightarrow x^r + y^r - r_{n-1}y + 1 = 0 \rightarrow x^r - r_{n-1} + 1 + y^r - 1y + 1 \Rightarrow (x-1)^r + (y-r)^r = 0$$

$$\Rightarrow \dots, n=1$$

۲. صوت تاء → تاء مفتوحة

نقد ای هم هست

سوال (۷)

الخ)  $x \sin y + y \sin x \xrightarrow{\text{تفاضل}} x \cdot 1 + y \cdot 1 \rightarrow x + y \rightarrow y = x + 1$

۴. جامع سند

10  $\sqrt{\frac{x}{y}} + \sqrt{\frac{y}{x}} = 2 \Rightarrow \sqrt{\frac{1}{y}} + \sqrt{y} = 2 \rightarrow (1, 1)$  فقط  
دوران صدق می کند

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11  $y = \sqrt{\frac{x-1}{x-2}} + \sqrt{\frac{2-x}{x}} \rightarrow \frac{2-x}{x} \rightarrow \frac{2}{-1} + \frac{x}{x} \rightarrow D_{f^{-1}}(0, 2]$  (سوال ۱)

سوال ۱۸

$$12 \quad \hookrightarrow \frac{n-1}{n-x} \geq 0 \quad \frac{1}{+} \frac{1}{-} \frac{1}{-} \frac{1}{+} \rightarrow D_{f_2}(-\infty, 1] \cup (x, +\infty)$$

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$D_f \cap D_{f'}^2(1,1)$

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$$\rightarrow \sqrt{n} + \sqrt{y-1} \geq \sqrt{x} \geq \sqrt{y-1} \geq \sqrt{x} - \sqrt{n} \Rightarrow \sqrt{x} - \sqrt{n} \geq 0 \Rightarrow \sqrt{x} \leq \sqrt{n}$$

$$D_f \subset [0, \sqrt{x}] \quad n \leq x$$

 $x \leq y$ 

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14.  $\sqrt{x^2 - 5x + 6} \rightarrow (x-1)(x-6)$   $\frac{1}{1+b-\phi+}$  

(سوال ۹)

$$\sqrt{x} - (1.5x + 14) > 0 \rightarrow -9x > -14 \rightarrow 9x > 14 \rightarrow x < \frac{14}{9} = D_f'$$
  
 $D_f' \cap D_f = (-\infty, 1] \cup [7, +\infty)$

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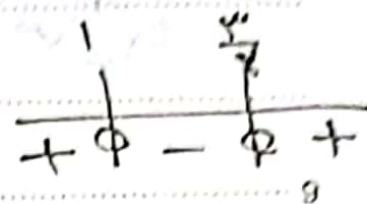
15  $\rightarrow \sqrt{\frac{x^2 - 2x + 9}{x^2 - 10x + 19}} \rightarrow (n-1)(n-2)$   $\frac{1 \quad 2 \quad 3 \quad 4}{1+9-10+10-10+}$   $D: (-\infty, 1] \cup (2, 9] \cup (10, +\infty)$

..(Λ.γ.φ.ω..)

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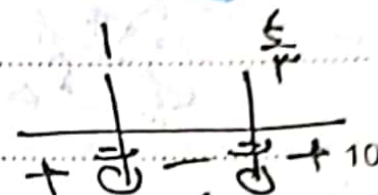
$$1) \frac{\sqrt{r^2 n^2 - 2n + 3}}{\sqrt{r^2 n^2 - 2n + 1}} = \frac{\sqrt{n^2 - 2n + 7}}{\sqrt{n^2 - 2n + 1}} = \frac{\sqrt{(n-2)(n-3)}}{\sqrt{(n-3)(n-1)}}$$

$$\rightarrow n \geq 1, \frac{r}{r} > \frac{r}{r}$$



(10 سوال)

$$\rightarrow n \geq 1, \frac{r}{r}$$



$$Df = (-\infty, 1) \cup \left[\frac{r}{r}, +\infty\right)$$

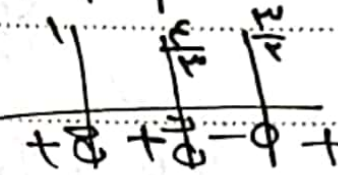
$$Df' = (-\infty, 1) \cup \left(\frac{r}{r}, +\infty\right)$$

$$Df \cap Df' = (-\infty, 1) \cup \left[\frac{r}{r}, +\infty\right)$$

$$\rightarrow y = \frac{\sqrt{r^2 n^2 - 2n + 3}}{\sqrt{r^2 n^2 - 2n + 1}}$$

$$\frac{\sqrt{(n-2)(n-3)}}{\sqrt{(n-3)(n-1)}}$$

$$\rightarrow n \geq 1, \frac{r}{r} > \frac{r}{r}$$



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$$Df = (-\infty, 1) \cup \left(1, \frac{r}{r}\right) \cup \left[\frac{r}{r}, +\infty\right)$$

$$\cancel{Df \cap Df' = (-\infty, 1) \cup \left[\frac{r}{r}, +\infty\right)}$$

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